

5247, 6223, 14723, 19186, 18997, 19891, 29617, 42519, 69324, 69181, 69146, 76458, 78595, 82159, 84522, 84810, and 89967 of SEQ ID NO:2.

45. (NEW) The polynucleotide according to claim 43, wherein said contiguous span is 18 to 35 nucleotides in length and said biallelic marker is within 4 nucleotides of the center of said polynucleotide.

46. (NEW) The polynucleotide according to claim 45, wherein said polynucleotide consists of said contiguous span and said contiguous span is 25 nucleotides in length and said biallelic marker is at the center of said polynucleotide.

47. (NEW) The polynucleotide according to claim 43, wherein the 3' end of said contiguous span is located at the 3' end of said polynucleotide and said biallelic marker is present at the 3' end of said polynucleotide.

48. (NEW) A composition comprising: an isolated, purified, or recombinant polynucleotide consisting essentially of a contiguous span of 8 to 50 nucleotides of any one of SEQ ID NOs:1 and 2 or the complement thereof, wherein the 3' end of said contiguous span is located at the 3' end of said polynucleotide, and wherein the 3' end of said polynucleotide is located within 20 nucleotides upstream of a *TBC-1*-related biallelic marker in said sequence.

49. (NEW) The composition of claim 48, wherein the 3' end of said polynucleotide is located 1 nucleotide upstream of said *TBC-1*-related biallelic marker in said sequence.

50. (NEW) A composition comprising: an isolated, purified, or recombinant polynucleotide which encodes a polypeptide comprising a contiguous span of at least 6 amino acids of SEQ ID NO:5.

51. (NEW) The polynucleotide according to claim 43 attached to a solid support.

52. (NEW) An array of polynucleotides comprising at least one polynucleotide according to claim 51.

53. (NEW) An array according to claim 52, wherein said array is addressable.

54. (NEW) The polynucleotide according to claim 43 further comprising a label.

55. (NEW) A composition comprising: a recombinant vector comprising a polynucleotide according to claim 43.

56. (NEW) A composition comprising: a host cell comprising a recombinant vector according to claim 55.

57. (NEW) A composition comprising: an isolated, purified, or recombinant polypeptide comprising a continuous span of at least 8 amino acids of SEQ ID NO:5.


58. (NEW) A composition comprising: an isolated or purified antibody composition capable of selectively binding to an epitope-containing fragment of a polypeptide according to claim 57.

59. (NEW) A method of making a purified or isolated *TBC-1* polypeptide encoded by a polynucleotide of claim 42; wherein said method comprises the steps of:

- (i) obtaining a cell capable of expressing said polypeptide;
- (ii) growing said cell under conditions suitable to produce said polypeptide; and
- (iii) isolating said polypeptide.

60. (NEW) A method of genotyping comprising the steps of:

- (a) obtaining a nucleic acid sample from an individual; and

 (b) determining the identity of a polymorphic base at a *TBC-1*-related biallelic marker or the complement thereof in said nucleic acid sample, wherein the identity of the polymorphic base determines the genotype of the individual at said *TBC-1*-related biallelic marker and, wherein said *TBC-1*-related biallelic marker is positioned in SEQ ID NO:1 or SEQ ID NO:2.

61. (NEW) A method according to claim 60, further comprising amplifying a portion of said sequence comprising the biallelic marker prior to said determining step.

62. (NEW) A method according to claim 60, wherein said determining is performed by a hybridization assay, sequencing assay, microsequencing assay or enzyme-based mismatch detection assay.

63. (NEW) A method according to claim 60, wherein said *TBC-1*-related biallelic marker is selected from the group consisting of the biallelic markers in positions 9494 of the SEQ ID NO:1, and 1443, 5247,